

Rabbit Anti-GAS2 antibody

SL13289R

Product Name:	GAS2
Chinese Name:	生长休止特定蛋白2抗体
Alias:	GAS 2; GAS-2; Gas2; GAS2_HUMAN; Growth arrest specific 2; Growth arrest specific protein 2; Growth arrest-specific protein 2; MGC32610.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Pig, Cow, Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	35kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human GAS2:141-240/313
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	Gas2 is a 313 amino acid protein encoded by the human gene GAS2. Gas2 is thought to play a role in apoptosis by acting as a cell death substrate for caspases. Gas2, a component of the microfilament system, is cleaved by a caspase (caspase-3 and caspase-7) at Asparagine 278 during apoptosis. The cleaved form resulting from this dramatically induces the rearrangement of the Actin cytoskeleton and causes potent changes in the shape of the affected cells. Gas2 is believed to also be involved in the

membrane ruffling process. During the G0-G1 transition phase Gas2 can be found phosphorylated on its serine residues. Gas2 is a cytoskeleton and peripheral membrane protein that co-localizes with Actin fibers at the cell border and along the stress fibers in growth-arrested fibroblasts. Gas2 is mainly membrane-associated but when hyperphosphorylated it will accumulate at membrane ruffles. Gas2 is specifically expressed at growth arrest and is ubiquitously expressed with highest levels found in liver, lung and kidney. There is no evidence, however, of Gas2 expression in spleen.

Function:

May play a role in apoptosis by acting as a cell death substrate for caspases. Is cleaved during apoptosis and the cleaved form induces dramatic rearrangements of the actin cytoskeleton and potent changes in the shape of the affected cells. May be involved in the membrane ruffling process.

Subcellular Location:

Cytoplasm > cytoskeleton. Membrane. Component of the microfilament system. Colocalizes with actin fibers at the cell border and along the stress fibers in growth-arrested fibroblasts. Mainly membrane-associated. When hyperphosphorylated, accumulates at membrane ruffles.

Tissue Specificity:

Ubiquitously expressed with highest levels in liver, lung, and kidney. Not found in spleen.

Post-translational modifications:

Cleaved, during apoptosis, on a specific aspartic residue by caspases. Phosphorylated on serine residues during the G0-G1 transition phase.

Similarity:

Belongs to the GAS2 family.

Contains 1 CH (calponin-homology) domain.

Contains 1 GAR domain.

SWISS:

O43903

Gene ID:

2620

Database links:

Entrez Gene: 2620Human

Entrez Gene: 14453Mouse

Omim: 602835Human

SwissProt: O43903Human

SwissProt: P11862Mouse

Unigene: 632151Human

Unigene: 207360Mouse

Unigene: 386823 Mouse

Unigene: 471773 Mouse

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.